

ABSTRACT

The present invention relates to polyamide/polyolefin blends containing carbon nanotubes.

The invention also relates to structures comprising at least one layer of these blends and optionally at least one layer of another material. These structures may be in the form of bottles, tanks, containers, hoses, pipes and vessels of any kind. These structures may be manufactured using the standard techniques for thermoplastics, such as injection moulding, extrusion-blow moulding and coextrusion.

The present invention, according to one embodiment, relates to a multilayer tube comprising, in its radial direction from the outside inwards:

- an outer layer (1) formed from a polyamide chosen from PA-11 and PA-12;
- a layer (2) formed from a tie;
- an optional layer (3) formed from an EVOH;
- optionally, a tie layer (this does not exist if no layer (3) is present);
- an inner layer (4) formed from a polyamide (A)/polyolefin (B) blend having a polyamide matrix and containing carbon nanotubes;

with the layers being successive and adhering to one another in their respective areas of contact.